

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/033,146 10/27/2001		10/27/2001	Mingte Chen	M-11528-3P US	7132	
60975	7590	06/12/2006		EXAMINER		
CSA LLP	WOOD a		JOO, JOSHUA			
BLDG. 4, SU		PRINGS RD.	ART UNIT	PAPER NUMBER		
AUSTIN, T			2154			
				DATE MAILED: 06/12/2000	DATE MAILED: 06/12/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	)				
		10/033,146	CHEN ET AL	<b>-</b> .				
	Office Action Summary	Examiner	Art Unit					
		Joshua Joo	2154	· ·				
Period fo	The MAILING DATE of this communica or Reply	tion appears on the cove	r sheet with the corresponden	ce address				
WHIC - Exter after - If NC - Failu Any (	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL assists of time may be available under the provisions of 3 SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statute re to reply within the set or extended period for reply will reply received by the Office later than three months after and patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF THIS CO 77 CFR 1.136(a). In no event, how cation. ory period will apply and will expire , by statute, cause the application to	OMMUNICATION. ever, may a reply be timely filed  SIX (6) MONTHS from the mailing date of the become ABANDONED (35 U.S.C. § 13	f this communication.				
Status								
1)⊠	Responsive to communication(s) filed	on <u>5/12/2006</u> .						
<u> </u>	•	☐ This action is non-fin	al.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
V	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims							
4) 🖂	Claim(s) <u>1-55 and 58-67</u> is/are pending	in the application.						
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) 🗌								
· · · =								
7)	Claim(s) is/are objected to.							
/—								
Applicat	ion Papers							
	•	- - - -						
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
		y the Examiner, were the	y according to the first of the	, 0 .02.				
_	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)	a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority do		• •					
	3. Copies of the certified copies of			ional Stage				
	application from the Internationa		• • •					
* See the attached detailed Office action for a list of the certified copies not received.								
AMark	4/_\							
Attachmen	ot(s) ce of References Cited (PTO-892)	<i>A</i> ) [	Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.								
3) 🛛 Infor	mation Disclosure Statement(s) (PTO-1449 or PT		Notice of Informal Patent Applicatio	n (PTO-152)				
Paper No(s)/Mail Date <u>5/12/2006</u> . 6)								

Art Unit: 2154

# Response to Amendment filed 5/12/2006

1. Claims 1-55, 58-67 are presented for examination.

#### Information Disclosure Statement

2. The information disclosure statement (IDS) submitted 5/12/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-6, 8-14, 16, 17, 19-31, 33-42, 44-53, 55, and 58-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delph, US Patent #6,199,104 (Delph hereinafter), in view of Chong et al, US Publication #2002/0144233 (Chong hereinafter).
- 5. As per claims 1, 16, 20, 23, 33, 34, 44, 45, 55, and 58, Delph teaches substantially the invention as claimed including the method and system for pushing messages to a client computer, wherein the messages are first pushed through an intermediate server, Delph's teachings comprising:

a processor (Col 3, lines 64. Computer.);

memory, the memory storing instructions for executing on the processor (Col 4, lines 48-49. Computer has memory to store host data.);

Application/Control Number: 10/033,146

Art Unit: 2154

controlling instructions to control a user interface presented by a web browser comprising (Col 4, lines 6-13. Intermediate server sends information that will allow receiver computer to render its screen.):

registering instructions to register the web browser as available to receive an message, wherein the web browser is not blocked waiting for the message (Col 6, lines 1-10, 49-65; Col 7, lines 8-11. Registers for receiver computer to receive message.); and

push instructions to cause a web server to push message to the web browser (Col 5, lines 14-25; Col 6, lines 1-10. Push data to the web browser.) in response to an incoming data (Col 5, lines 4-16. Intermediate server receives data.);

wherein the web browser presents a user interface change in response to the message (Col 4, lines 9-12, 65-67. The web browser is rendered in response to the message. Render web page.);

the incoming data is received by a communication server (Fig. 2 #150, Col 6, line 45-48. Intermediate server 50 receives data.); and

wherein the computer-readable medium further stores the user interface changing instructions (Col 4, lines 47-50. Host computer has memory to store data.).

- Delph teaches substantial features of the claimed invention including pushing data in response to incoming data. However, Delph does not teach of pushing asynchronous messages, and pushing data in response to receiving incoming events.
- 7. Chong teaches the concept of receiving events, and in response to the events, pushing asynchronous messages (Paragraph 0007).
- 8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Delph and Chong because the teachings of Chong to receive

Application/Control Number: 10/033,146

Art Unit: 2154

events, and to push asynchronous messages in response to the events would improve the system of Delph by allowing clients to receive real-time data in alerts (Chong, Paragraph 0007), and implementing a communication server would allow events to be forwarded to another server, which is similar to the process of receiving and forwarding data as taught by Delph (Col 6, line 45-48).

9. As per claim 19, Delph teaches substantially the invention as claimed including a method for pushing messages to a client computer, wherein the messages are first pushed through an intermediate server, Delph's teachings comprising:

establishing a first connection between a web browser and a web server (Fig. 1 #6, Col 4, lines 4-9. Web browser connects to the intermediate server.);

establishing a second connection between the web server and a business process server (Fig. 1 #1A, Col 4, lines 4-9. Host computer connects to the intermediate server.); controlling a user interface presented by the web browser comprising:

registering the web browser with the business process server (Col 6, lines 49-56; Col 7, lines 12-15. Client contacts salesperson to receive information through a computer network.

Bank teller may provide account information to a client. Registration is an essential step to receive the service.);

providing the web server with a message to push to the web browser, the providing being performed by the business process server (Col 5, lines 14-15; Col 6, lines 7-8, 36-65. Host computer submits data to push to the web browser.), the providing being performed in response to an incoming data (Col 5, lines 4-16. Host computer contacts and sends data to the intermediate server.);

causing the web server to push the message to the web browser (Col 5, lines 14-15; 23-25; Col 6, lines 1-10, 36-48. Data is sent to the intermediate server, wherein the intermediate server push data to the web browser. Data is continuously transmitted.);

wherein the web browser performs a user interface change in response to the message (Col 4, lines 9-12, 65-67. Causes a change in response due to the message. Render web page.); and

the incoming data is received by a communication server (Fig. 2 #150, Col 6, line 45-48.

Intermediate server 50 receives data.).

- 10. Delph teaches substantial features of the claimed invention. However, Delph does not teach of pushing asynchronous messages, and pushing data in response to receiving incoming events.
- 11. Chong teaches the concept of receiving events, and in response to the events, pushing asynchronous messages (Paragraph 0007).
- 12. Motivation for combination is similar to rejection of claim 1. See paragraph 8.
- 13. As per claim 21, Delph teaches substantially the invention as claimed including a method for pushing asynchronous messages to a client computer, wherein the messages are first send through an intermediate server, Delph's teachings comprising:

causing the web browser to provide a wait request to a web server, the wait request being associated with the web browser (Col 4, lines 4-5; Col 6, lines 53-55; Col 7, lines 15-25. Web browser provides a request to the intermediate server for information. Client receives information such as stock or email for later view.);

identifying a source of the message (Col 5, lines 6-11; Col 6, lines 53-55. Host computer sends a set-up request to the intermediate server, and in response, the intermediate server sends a set-up confirmation output.);

associating the wait request with the source, wherein the associating identifies the web browser as a recipient of the message (Col 4, lines 4-5; Col 6, lines 7-8, 36-37, 63-65. Client requests information and the host computer sends data to the web browser.); and

pushing the message to the web browser (Col 6, lines 1-10. Push data to the web browser.) in response to incoming data (Col 5, lines 4-16. Host computer contacts and sends data to the intermediate server.);

wherein the browser presents a user interface change in response to the message (Col 4, lines 8-10, 65-67; Col 7, lines 15-17. A display is rendered on the host computer. Render web page.); and

the incoming data is received by a communication server (Fig. 2 #150, Col 6, line 45-48. Intermediate server 50 receives data.).

- 14. Delph teaches substantial features of the claimed invention. However, Delph does not teach of pushing asynchronous messages, and pushing data in response to receiving incoming events.
- 15. Chong teaches the concept of receiving events, and in response to the events, pushing asynchronous messages (Paragraph 0007).
- 16. Motivation for combination is similar to the rejection of claim 1. See paragraph 8.

Application/Control Number: 10/033,146

Art Unit: 2154

17. As per claim 22, Delph teaches substantially the invention as claimed including a method for pushing messages to a client computer wherein the messages are first send through an intermediate server, Delph's teachings comprising:

causing the web browser to provide a wait request to a web server, wherein the wait request is associated with the web browser and a target from which a message originates (Col 4, lines 4-5; Col 5, lines 14-15; Col 6, lines 53-55. Web browser provides a request to the intermediate server for information. Client contacts a salesperson for information through a computer network. Hot computer submits host data.);

generating the message, the message identifying the web browser as a recipient of the message, the generating being performed by the target (Col 5, lines 14-15; Col 6, lines 36-37; Col 53-55. Host computer submits host data to the intermediate server.);

providing the message to the web server (Col 5, lines 14-15; Col 6, lines 36-37. Host computer submits information to the intermediate server.); and

causing the web server to push message to the web browser (Col 5, lines 14-25; Col 6, lines 1-10. The intermediate server push data to the web browser.) in response to incoming data (Col 5, lines 4-16. Host computer contacts and sends data to the intermediate server.);

wherein the web browser presents a user interface change in response to the message (Col 4, lines 9-12, 65-67. Causes rendering in response to the data. Render web page.); and the incoming event is received by a communication server (Fig. 2 #150, Col 6, line 45-48. Intermediate server 50 receives data.).

18. Delph teaches substantial features of the claimed invention. However, Delph does not teach of pushing asynchronous messages, and pushing data in response to receiving incoming events.

- 19. Chong teaches the concept of receiving events, and in response to the events, pushing asynchronous messages (Paragraph 0007).
- 20. Motivation for combination is similar to the rejection of claim 1. See paragraph 8.
- 21. As per claim 2, Delph teaches the method of claim 1 further comprising: generating the message (Col 5, lines 14-15; Col 6, lines 36-37. Host computer submits information to be sent to the receiver computer.).
- 22. As per claim 3, Delph teaches the method of claim 1 further comprising: preparing to receive the asynchronous message (Col 6, lines 7-8; 36-38. Receiver computer receives the message.).
- 23. As per claims 4, 5, 24, 35, 46, and 59, Delph teaches the invention comprising:

  providing instructions to cause the web browser to provide a wait request to the web
  server, the wait request being associated with the web browser (Col 4, lines 4-5; Col 5, lines 1415; Col 6, lines 53-55. Web browser provides a request to the intermediate server for information. Host computer submits host data);

identifying instructions to identify a source of the message (Col 5, lines 6-12; Col 6, lines 53-55. Client contacts host computer through a computer network. Intermediate server establishes a session with the host computer.); and

associating instructions to associate the wait request with the source, wherein the associating identifies the web browser as a recipient of the message (Col 4, lines 4-5; Col 6, lines 7-8; 36-37; 63-65. Client requests information, and the host computer sends message to the web browser.).

24. As per claims 6, 25, 36, 47, and 60, Delph teaches the invention comprising:

request providing instructions to cause the web browser to provide a wait request to the web server, the wait request being associated with the web browser (Col 4, lines 4-5; Col 5, lines 14-15; Col 6, lines 53-55. Web browser provides a request to the intermediate server for information. Hot computer submits host data);

generating instructions to generate the message, the message identifying the wait request, wherein the identifying identifies the web browser as a recipient of the message (Col 5, lines 14-15; Col 6, lines 1-10. Host computer submits host data to intermediate server for transmission to the web browser.); and

message providing instructions to provide the message to the web server (Col 5, lines 14-15; Col 6, lines 47-48, 49-51. Client contacts host computer. Host computer provides asynchronous message to the server.).

25. As per claims 8, 26, 37, 48, and 61, Delph teaches the invention comprising:

storing instructions to store a reference to a callback function with information from the wait request (Col 6, lines 50-56, 64-65; Col 7, lines 13-19. Client contacts host computer, which allows for the host computer to send data to the intermediate server. Bank teller may provide account information to a customer. Broker may provide specific stock information.); and

using instructions to use the reference to call the callback function when the message is provided to the web server, wherein the callback function pushes the message (Col 6, lines 7-8, 50-56, 64-65; Col 7, lines 13-15. Client contacts host computer, which allows for the host computer to send data to the intermediate server. Data is pushed to the client. Bank teller may provide account information to a customer.).

- 26. As per claims 9, 27, 38, 49, and 62, Delph teaches the invention comprising: context providing instructions to provide the callback function with context information, the context information identifying the web browser (Col 6, lines 49-65. Client provides information to the travel agent through a computer network, so that for the travel agent can provide information presentable to the web browser of the client.).
- As per claims 10, 11, 28, 39, 50, and 63, Delph teaches the invention comprising: 27. assigning instructions to assign the wait request to a connection between the web server and a business process server (Col 4, lines 4-6; Col 5, lines 4-15. Client sends a request to an intermediate server, where intermediate server is connected to the host computer.); and

listening instructions to listen to the connection for the message (Col 5, lines 4-15; Col 6, lines 36-37. The intermediate server waits for a session from host computer.).

- 28. As per claims 12, 29, 40, 51, and 64, Delph teaches the invention comprising: calling instructions to call a callback function associated with the web browser when the message is received, wherein the callback function pushes the message; and (Col 5, lines 23-25; Col 6, lines 1-10, 36-48; Col 7, lines 11-26. Client submits contact information to host computer, so that the intermediate server may push information to the client's web browser when received from the host computer.).
- 29. As per claims 13, 30, 41, 52, and 65, Delph teaches the invention comprising: reference storing instructions to store a reference to the callback function (Col 6, lines 50-56, 64-65; Col 7, lines 13-15. Client contacts host computer through a computer network,

which allows for the host computer to send data to the intermediate server. Bank teller may provide account information to a customer.) and

reference using instructions to use the reference for calling the callback function (Col 6, lines 50-56, 64-65; Col 7, lines 13-15. Client contacts host computer, which allows for the host computer to send data to the intermediate server. Bank teller may provide account information to a customer.);

30. As per claims 14, 31, 42, 53, and 66, Delph teaches the invention comprising: context storing instruction to store a second reference to context information, the context information identifying the web browser (Col 6, lines 50-65; Col 7, lines 13-15. Client contacts host computer through a computer network, which allows for the host computer to send data to the intermediate server. Bank teller may provide account information to a customer.) and

context using instructions to use the second reference for providing the context information to the callback function (Col 6, lines 50-56, 64-65; Col 7, lines 13-15. Client contacts host computer, which allows for the host computer to send data to the intermediate server. Bank teller may provide account information to a customer.).

- 31. As per claim 17, Delph teaches the method of claim 16, wherein the message includes an action instruction to cause the web browser to perform the action (Col 4, lines 8-13; Col 6, lines 36-37. The message allows the receiver computer to render a screen.).
- 32. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Delph and Chong, in view of Landsman et al, US Patent #6,314,451 (Landsman hereinafter).

- 33. As per claim 7, Delph does not teach the method of claim 6, wherein causing the web browser to provide the wait request comprises: downloading requesting instructions to the web browser, wherein downloading causes the web browser to execute the requesting instructions.
- 34. Landsman teaches of asynchronous sending of advertisements to a client computer. When the client browser encounters a web page with advertisement, the browser contacts the agent server to ensure that the executable code for the applet is updated. The browser downloads updated files and executes the applet. The web browser blocks from downloading any advertisement until the applet is executing (Col 23, lines 18-34; Col 32, lines 53-55; Col 39, lines 3-12).
- 35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Delph, Chong, and Landsman because since Delph teaches that the client does not need any compatible software programs other than a web browser to receive the data (Col 7, lines 6-8), it would have been desirable to download and executes applets for the web browser. The teachings of Landsman of downloading and executing applets would improve the system of Delph and Chong by allowing the client to receive information and to display the information on the client's web browser.
- 36. Claims 15, 18, 32, 43, 54, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delph and Chong, view of Boyle et al, US Patent #6,138,158 (Boyle hereinafter).
- 37. As per claims 15, 18, 32, 43, 54, and 67, Delph teaches of receiving information from a server and rendering the browser to the received information (Col 4, lines 8-13). However, Delph does not teach of causing a second user interface object to issue a sound to capture the

user's attention and presenting a screen pop of data; and bringing a web browser window to a front of screen.

- 38. Boyle teaches of pushing data to mobile devices where upon receiving message, the device produces a sound to capture the user's attention and a notification is prompted to the screen, the display coded HDML, similar to HTML (Col 6, lines 5-6; Col 10, lines 59-61; Col 11, lines 2-14).
- 39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Delph, Chong, and Boyle because since Delph teaches of rendering the display screen of the client when information is received, it would have been desirable to produce a sound and prompt the web browser to the screen to capture the client's attention. The teachings of Boyle to produce a sound and display a notification on the screen would improve the system of Delph and Chong by providing an alternative method to make the user aware of incoming messages.

### Response to Arguments

40. Applicant's arguments filed 5/12/2006 have been fully considered but they are not persuasive. Applicant argued that (1) The synchronization of data between the host computer and receiver computer is irrelevant to the claimed subject matter; and (2) In the absence of an outstanding request by the receiver computer, new data send to the intermediate server by the host computer will not be sent to the receiver computer. Therefore, Delph does not teach pushing an asynchronous message.

Examiner traverses the arguments:

Art Unit: 2154

As to point (1), Examiner respectfully submits that the relevance of the synchronization of data between the host computer and receiver computer is to provide a response to Applicant's previous argument that asynchronous data and synchronous data in Delph do not refer to the type of messages.

- 42. As to point (2), Delph teaches:
  - i) Column 5, line 65 Column 6, line 10, "At step 6, receiver computer 90 contacts intermediate server 50 through Internet 40 using a single URL and provides intermediate server 50 with session certification information in this URL to retrieve the translated host data saved in local storage device. On receiving a request for this information, intermediate server 50 sends the translated host data... Using a server push technique allows a Web browser on receiver computer 90 to continuously receive data in the Web's HTTP protocol without having to repeat step 6."
- According to Delph, data is continuously sent to the receiver without having to repeat step 6, which is to request data by the web browser. Therefore, this process represents "pushing" since no subsequent requests are required by the receiver computer to receive data. Without subsequent requests, the data is automatically sent to the receiver computer.
- 44. Furthermore, Applicant argued that data is not pushed if the receiver requests the data. However, Applicant's specification discloses that a request is send by the web browser to the web server to initiate the pushing of data. Applicant specification discloses:
  - ii) Page 6, lines 19-25, "... causing the web browser to provide a wait request to a web server, the wait request being associated with the web browser. The method further includes identifying a source of an asynchronous message and associating the wait request with the source, wherein the associating identifies the web browser as a recipient of the asynchronous message. The method further includes pushing the asynchronous message to the web browser."
  - iii) On page 11, lines 17-23, "In Set Up communication Connections step 310, communication continues are established between the web browser, web server, and a business process server that is responsible for determining that an asynchronous message should be pushed to the web browser."

Art Unit: 2154

45. According to the above quoted sections (ii) and (iii) of Applicant's specification, a request is sent by the web browser to establish communication with the web browser for pushing data to the web browser. Applicant argued that according to Delph, no data is pushed to a receiver computer without receiving a request. In a similar manner, according to Applicant specification, without providing a HTTP request, there is no association between the web browser and the source to push the asynchronous message. (Also see claims 4 and 22).

#### Conclusion

- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 47. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.

Art Unit: 2154

49. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

50. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 30, 2006 JJ

SUPERVISORY PATENT TXAMINER
TECHNOLOGY CENTER 2100